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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/619,178	07/19/2000	Donald J. Boulia	RSW9-2000-0054-US1	1042

7590	06/03/2004	EXAMINER

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ART UNIT	PAPER NUMBER
2155	

DATE MAILED: 06/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>03</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>08 April 2004</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-30* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-30* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

1.   Claims 1-4, 6-13, 15-22 and 24-29 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Erickson et al (Erickson) (US 6,412,009 B1) in view of Inala et al

(Inala) (US 6,442,590 B1).

Regarding claims 1, 19 and 28, Erickson teaches a computer program product

for sending Transmission Control Protocol (TCP) messages through Hyper Text

Transfer Protocol (HTTP) systems, (e.g., see fig. 4 and abstract), the computer

program product embodied on one or more computer-readable media, comprising:

computer-readable program code means for establishing a send channel from a

first component on a client side of a network connection, through one or more HTTP-

based systems, to a second component on a remote side of the network connection

(e.g., see fig. 3 col. 3 lines 3-29);

computer-readable program code means for establishing a receive channel from

the first component, through one or more HTTP-based systems, to the second

component (e.g., see figs.3- 4 col. 3 lines 3-29 and col. 7 line 63-col. 8 line 4);

computer-readable program code means for establishing a first TCP connection

from a client on the client side to the first component (e.g., see col. 7 lines 45-50);

computer-readable program code means for establishing a second TCP connection from the second component to a target server on the remote side (e.g., see col.7 lines 50-62);

computer-readable program code means for transmitting client-initiated requests from the client to the target server by packing the client-initiated TCP requests into HTTP messages (i.e., a data message complying with a connection-oriented protocol such as TCP is generated at an endpoint such as client. The data message is embedded into the chunked data message complying with a chunking option of an HTTP specification, col. 2 lines 43-48) which are transmitted on the send channel (e.g., see col. 2 lines 41-59); and

computer-readable program code means for transmitting server-initiated TCP requests from the target server to the client by packing the server-initiated TCP requests into HTTP messages (i.e., a data message complying with a connection-oriented protocol such as TCP is generated at an endpoint such as host-system/server. The data message is embedded into the chunked data message complying with a chunking option of an HTTP specification, col. 2 lines 43-48) which are transmitted on the receive channel (e.g., see col. 5 lines 53-58 and col. 7 lines 30-41).

Erickson does not explicitly teach the receive channel is distinct from the send channel.

Inala, in the same field of endeavor, teaches the receive channel is distinct from the send channel (col. 8 lines 30-32). It would have been obvious to one having ordinary skill in the art at the time the invention was made to have utilized two distinct channels

of Inala in the process of transmitting and receiving message using HTTP protocol in

Erickson because the use of two channels would enable data to be transmitted to and

received from two separate connections. This would have improved the efficiency of

transmission in term of cost and simplicity required for the connections.

Regarding claims 2, 20 and 29, Erickson-Inala teaches computer-readable

program code means for receiving a TCP request from the client at the first component

on the first TCP connection (Erickson, Fig. 3 col. 3 lines 18-20 and col. 3 line 66-col. 4

line 9); computer-readable program code means for packaging the received client-

initiated TCP request in an HTTP POST request message (Erickson, col. 2 lines 41-47

and col. 8 lines 5-8); computer-readable program code means for sending the request

to the second component (Erickson, col.10 lines 4-5); computer-readable program code

means for receiving the sent request message at the second component (Erickson, col.

10 lines 6-13); computer-readable program code means for extracting the client TCP

request from the received request message (Erickson, col. 7 lines 45-53); and

computer-readable program code means for forwarding the extracted client TCP

request to the target server on the second TCP connection (Erickson, col. 7 lines 45-

53).

Regarding claims 3 and 21, Erickson-Inala teaches computer-readable program

code means for acknowledging the HTTP POST request by sending an HTTP POST

response from the second component to the first component (e.g., see col. 7 lines 3-

15).

Regarding claims 4 and 22, Erickson teaches computer-readable program code means for receiving the response at the first component (e.g., see col. 7 lines 3-29); and computer-readable program code means for closing the send channel, responsive to operation of the computer-readable code means for receiving the response (e.g., see col. 2 lines 11-15).

Regarding claims 6, 15 and 24, Erickson teaches means for performing operation on the second TCP connection and packaging the TCP request in the message (e.g., see col. 7 lines 30-41).

Regarding claims 7, 16 and 25, Erickson teaches means for sending request message from the first component to the second component (e.g., see col.10 lines 4-5); and means for receiving response at the first component (e.g., see 7 lines 3-13).

Regarding claims 8-9, 17-18 and 26-27, Erickson teaches a Multiple Purpose Internet Mail Extensions (MIME) type is set to binary/tcp (e.g., see col. 7 lines 3-29 and col. 8 lines 50-53).

Regarding claim 10, a system of claim 10 has a corresponding computer program product of claim 1; therefore, claim 10 is rejected under the same rationale as applied to claim 1.

Regarding claim 11, Erickson teaches means for receiving a TCP request from the client at the first component on the first TCP connection (e.g., see fig. 3 col. 3 lines 18-20 and col. 3 line 66-col. 4 line 9); means for packaging the received client-initiated TCP request in an HTTP POST request message (e.g., see col. 2 lines 41-47 and col. 8 lines 5-8); means for sending the request to the second component on the network

connection (e.g., see col.10 lines 4-5); means for receiving the sent request message at

the second component (e.g., see col. 10 lines 6-13); means for extracting the client TCP

request from the received request message (e.g., see col. 7 lines 45-53); and means

for forwarding the extracted client TCP request to the target server on the second TCP

connection (e.g., see col. 7 lines 45-53).

Regarding claim 12, Erickson teaches means for acknowledging the HTTP POST

request by sending an HTTP POST response from the second component to the first

component on the network connection (e.g., see col. 7 lines 3-15).

Regarding claim 13, Erickson teaches means for receiving the response at the

first component (e.g., see col. 7 lines 3-29); and means for closing the send channel,

responsive to operation of the computer-readable code means for receiving the

response (e.g., see col. 2 lines 11-15).

2.   Claims 5, 14, 23 ab 30 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Erickson in view Inala in further view of Fielding et al (RCF 2068).

Regarding claims 5, 23 and 30, Erickson-Inala teaches means for sending a

message from the first component to the second component (Erickson, col.10 lines 4-5);

means for receiving the message at the second component (Erickson, col. 10 lines 6-

13); means for receiving a server-initiated TCP request from the target server at the

second component on the second TCP connection (Erickson, col. 7 lines 30-41); means

for packaging the received server-initiated TCP request in a response message

(Erickson, col. 7 lines 35-39); means for sending the message from the second

component to the first component on the network connection (Erickson, col. 7 lines 39-41); means for receiving the message a the first component and extracting the server-initiated request from the message (Erickson, col. 7 lines39-45); and means for forwarding the extracted server-initiated TCP request to the client on the first TCP connection (Erickson, col. 7 lines 42-45). Erickson-Inala does not explicitly teach HTTP GET request. However, Fielding discloses HTTP GET request (e.g., see page 43 section 9.3). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Erickson-Inala in view of Fielding because such GET request would allow to retrieve only information identified by the Request-URI. This would have reduced unnecessary network usage (Fielding, page 43, section 9.3).

Regarding claim 14, Erickson-Inala teaches means for a message from the first component to the second component on the network connection (Erickson, e.g., see col.10 lines 4-5); means for receiving the message at the second component (Erickson, col. 10 lines 6-13); means for receiving a server-initiated TCP request from the target server at the second component on the second TCP connection (Erickson, e.g., see col. 7 lines 30-41); means for packaging the received server-initiated TCP request in a response message (Erickson, e.g. see col. 7 lines 35-39); means for sending the message from the second component to the first component on the network connection (Erickson, e.g., see col. 7 lines 39-41); means for receiving the message a the first component and extracting the server-initiated request from the message (Erickson, e.g., see col. 7 lines 39-45); and means for forwarding the extracted server-initiated

TCP request to the client on the first TCP connection (Erickson, e.g., see col. 7 lines 42-45). Erickson-Inala does not explicitly teach HTTP GET request. However, Fielding discloses HTTP GET request (e.g., see page 43 section 9.3). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Erickson-Inala in view of Fielding because such GET request would allow to retrieve only information identified by the Request-URI. This would have reduced unnecessary network usage (Fielding, page 43, section 9.3).

3.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Oanh L. Duong whose telephone number is (703) 305-0295. The examiner can normally be reached on Monday- Friday, 8:00AM - 5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hosain T. Alam can be reached on (703) 308-6662. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

O.D
May 15, 2004

HOSAIN ALAM
SUPERVISORY PATENT EXAMINER